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## AMENDMENTS TO THE SPECIFICATION

Page 9, paragraph beginning at line 9:

Preferably, computing the successive reachable sets includes determining a first set among the reachable sets, disjoint from the initial set, such that all of the states in the first set are reached from the initial states in a first cycle of the transition relation, and determining the successive reachable sets, following the first set, such that all the states in each of the sets are reached from the states in the preceding set in a successive cycle of the transition relation, and so that each of the sets is disjoint from the initial set and from the other sets determined before it. Further preferably, producing the partial trace includes selecting one of the states from each of at least some of the successive reachable sets. Most preferably, selecting the one of the states includes, for each of the selected states, choosing a predecessor state among the states in the preceding set until the state on the trace in the first set is found, and choosing, in the initial set, the predecessor state in the initial set to the state in the first set.

Page 16, paragraph beginning at line 9:

It may sometimes occur, however, that the state space exploration terminates, with no new reachable states to find, Appln. No. 10/042,294 Amd. dated December 21, 2005 . Reply to Office Action of September 21, 2005

before reaching target set 54. For example, a path 66 in Fig. 3 is seen to reach only events 60 and 62, and not final event 64. The processor accordingly informs user 24 that no full trace exists for the user's path specification.